### A.6 POWER SPECTRAL DENSITY

Test Date	2019/09/29~10/06	Temp./Hum.	22~24°C/52~56%	
Cable Loss	0.60dB	Tested By	Brian Hsieh	
Test Voltage	AC 120V, 60Hz (via AC Adapter)			
Simultaneous Factor 10 log(n) (Note: "n" is antenna number)		802.11b/g/BLE: 0dB 802.11n-HT20/40: 3dB	802.11ax-HE20/40: 3dB	

#### A.6.1 Power Spectral Density Result

Mode	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
	2412	-3.88	
202 11h	2442	-2.47	
802.11b	2462	-4.66	
	2472	-6.53	
	2412	-7.41	
<u>802 11 -</u>	2442	-2.58	
802.11g	2462	-8.03	
	2472	-12.29	
	2412	-5.39	
902 11 a UT20	2442	-1.80	
802.11n-HT20	2462	-6.09	
	2472	-13.58	
802.11n-HT40	2422	-8.76	<8 dBm/3kHz
	2442	-8.84	
802.1111-Н140	2452	-8.25	
	2462	-14.25	
	2412	-5.27	
900 11 UE20	2442	-4.11	
802.11ax-HE20	2462	-6.75	
	2472	-13.76	
	2422	-8.42	
	2442	-9.22	
802.11ax-HE40	2452	-10.90	
	2462	-11.58	

Note: All results have been included cable loss and Simultaneous Factor.

File Number: C1M2009193

Report Number: EM-F200416



Mode	RU Configuration	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
	26/0		5.22	
	52/37	2412	1.13	
802.11ax-HE20	106/53		-2.79	
802.11ах-пе20	26/8		-11.43	<8 dBm/3kHz
	52/40	2472	-13.03	
	106/54		-12.17	
802.11ax-HE40	242/61	2422	-5.71	
002.11ах-пЕ40	242/62	2462	-13.49	

Mode	Centre Frequency (MHz)	Power Spectral Density (dBm)	Limit
	2402	-9.78	
BLE	2440	-9.63	<8 dBm/3kHz
	2480	-9.49	

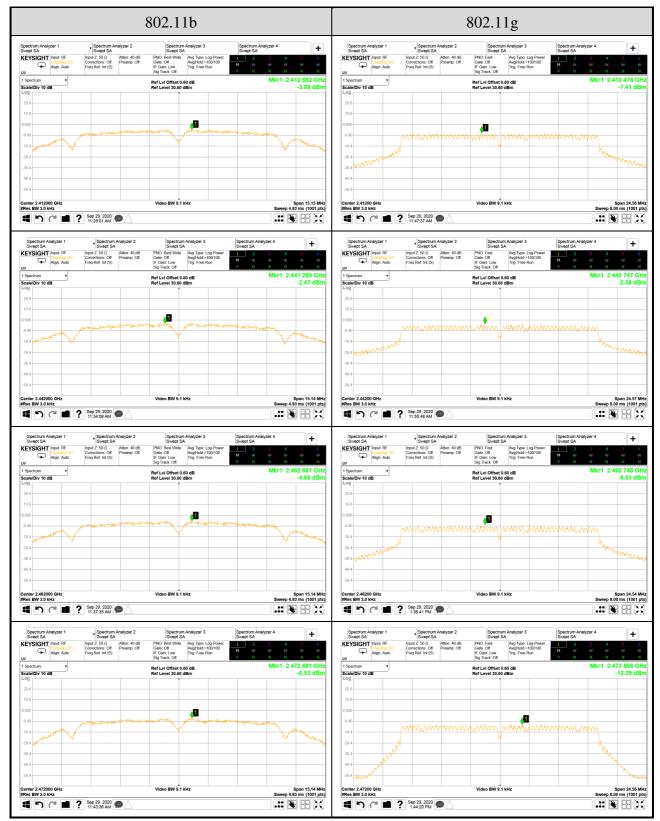
Note: All results have been included cable loss and Simultaneous Factor.

Report Number: EM-F200416



Fax: +886 2 26099303

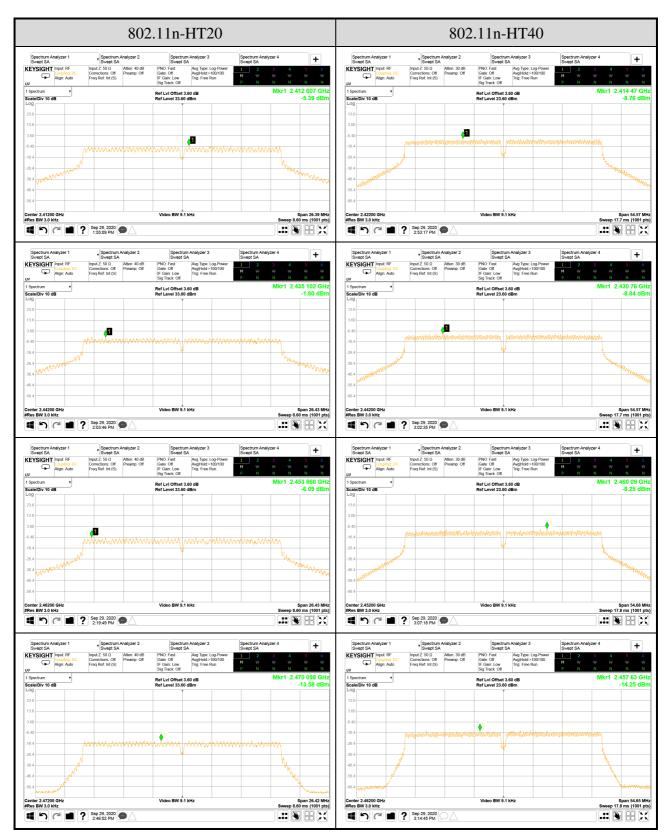
#### A.6.2 Measurement Plots



Note: All results have been included cable loss and Simultaneous Factor.

Report Number: EM-F200416



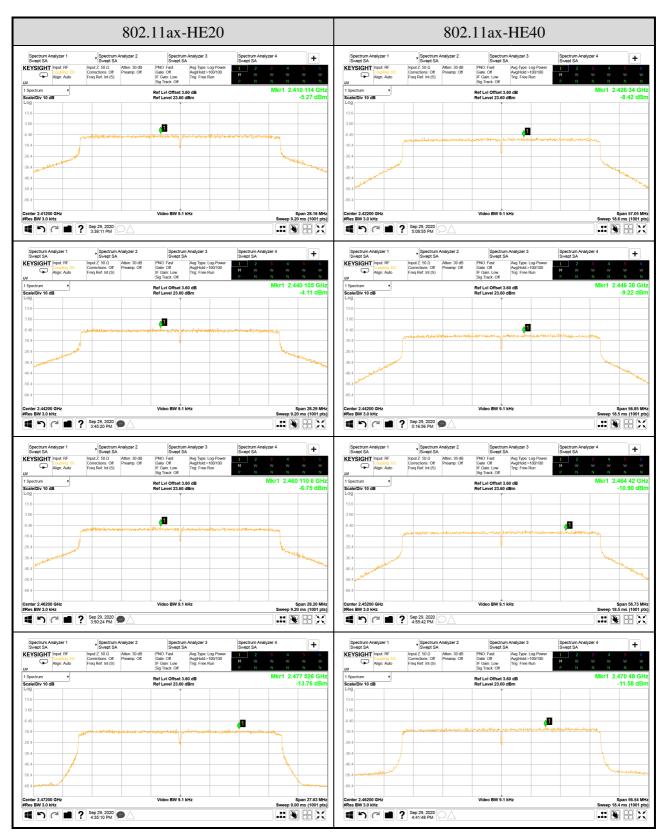


Note: All results have been included cable loss and Simultaneous Factor.

File Number: C1M2009193

Report Number: EM-F200416



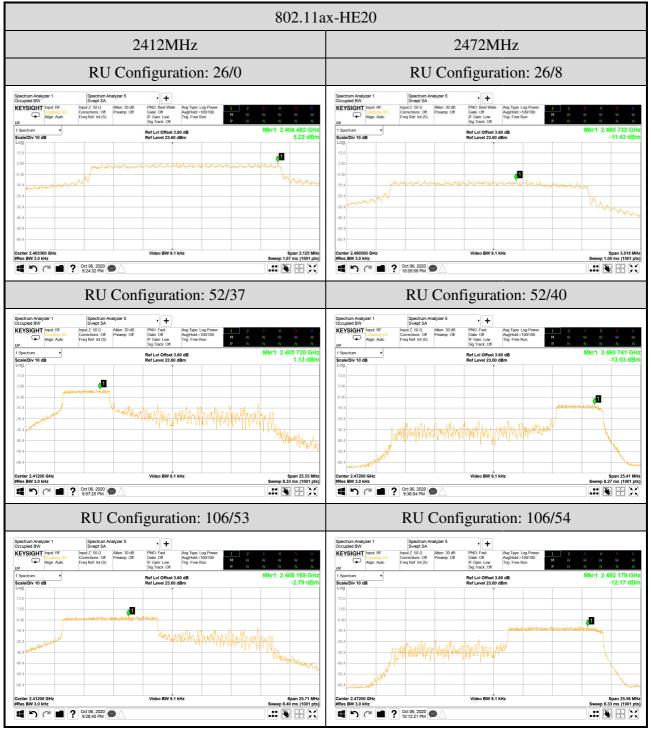


Note: All results have been included cable loss and Simultaneous Factor.

Report Number: EM-F200416



APPENDIX A-Page 138 o f 140 Tel: +886 2 26099301 Fax: +886 2 26099303

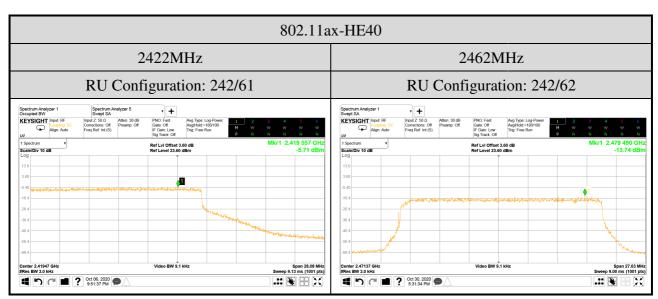


Note: All results have been included cable loss and Simultaneous Factor.

Report Number: EM-F200416



APPENDIX A-Page 139 o f 140 Tel: +886 2 26099301 Fax: +886 2 26099303



Note: All results have been included cable loss and Simultaneous Factor.

File Number: C1M2009193

Report Number: EM-F200416



APPENDIX A-Page 140 o f 140 Tel: +886 2 26099301 Fax: +886 2 26099303

Spectrum Anal	yzer 1	Spectrum A Swept SA	nalyzer 2	Spectru	m Analyzer 3	Spectrum Analyze Swept SA	r 4
Wept SA	Input: RF	Input Z: 50 Ω Corrections: Off	Atten: 30 dB	Swept S PNO: Best Wide Gate: Off	A Avg Type: Log-Power Avg[Hold:>100/100 Trig: Free Run	1 2 3	4 5
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Align: Auto	Freq Ref: Int (S)	Preamp: Off	IF Gain: Low Sig Track: Off	Trig: Free Run	M ₩ ₩ P N N	
1 Spectrum	T			Ref Lvi Offset 0	.60 dB	Mk	
Scale/Div 10 o	1B			Ref Level 20.60	dBm		-9.78 d
10.6							
0.600							
-9.40			ന് പ്രഹ	LAND DAM AV	A 0. 0	Barri Barri a	
-19.4 JMW	ta Marin	NAMANA	FFWYFV.	lh àstél - li - soi	ANAMANA	HE ARE A ANDA	WMM MM
-29.4		· .					·
-39.4							
-49.4							
-69.4							
Center 2.4020 Res BW 3.0				Video BW 9.1	kHz		Span 1.677 Sweep 1.00 ms (1001
4 5	C 🔳 (	Sep 29, 2020 10:58:49 AM					
Spectrum Anal Swept SA	yzer 1	Spectrum A Swept SA	nalyzer 2	Spectru Swept S	m Analyzer 3 A	Spectrum Analyze Swept SA	er 4
KEYSIGHT		Input Z: 50 Ω Corrections: Off	Atten: 30 dB Preamp: Off	PNO: Best Wide Gate: Off	Avg Type: Log-Power Avg Hold:>100/100 Trig: Free Run	1 2 3 M ₩ ₩	4 5 ₩ ₩
ж м	Align: Auto	Freq Ref: Int (S)		IF Gain: Low Sig Track: Off	Trig: Free Run	P N N	N N
1 Spectrum Scale/Div 10 d	, T			Ref Lvi Offset 0 Ref Level 20.60	.60 dB	Mk	r1 2.439 991 6 0 -9.63 d
Log	18			Kei Levei 20.60	ubili		-5.05 u
10.6							
0.600					•		
-9.40							
-19.4 mart /		A	Mr. Marth	IN MARKAN	a la ale ano.	h ma line h a sa	
10.108	w Mary	when here	mann	MMMM	- YAYAMAAMA	ANAMANA	Warm
-29.4	w.mmmun	rynnyyrwr	produce.	hundry	Yayarayaray	hallyhanden	VIANNYMY
-29.4	W. MANAN		rr wyw	hhhhhh	Yiyikiniy	hay many	MrAnny
-29.4 -39.4 -49.4	h and a second sec	e hand and a second	produ.	14 MAN MANANA	A A A A A A A A A A A A A A A A A A A A	hay many	Marthany
-29.4 -39.4 -49.4 -59.4			rr when	1000 AMENTARIA	And the second s	And	Venturnymy
-29.4 -39.4 -49.4 -59.4 -69.4			MARAN CANNON	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<sup>a</sup> -yayaparan parangy	Artholizapel and an	
-29.4 -39.4 -49.4 -59.4	000 GHz Hz		Provine Contraction of the Contr	Video BW 9.1	<sup>a</sup> -yayaparan parangy	hay may	Span 1.679 Sweep 1.00 ms (1001
-29.4	KHZ			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<sup>a</sup> -yayaparan parangy		Span 1.679 Sweep 1.00 ms (1001
-29.4 -39.4 -49.4 -59.4 -69.4		Sep 29, 2020 11:00:14 AM		Video BW 9.1	NHZ		Span 1.679 Sweep 1.00 ms (1001
-28.4 -39.4 -49.4 -59.4	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A	D A	Video BW 9.1	т. Алаузаг 3	Spectrum Analyze Spectrum Analyze	Span 1.679 Sweep 1.00 ms (1001
-28 4	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A Spectrum A Spectrum A Interf 2: 000 pm 4		Video BW 9.1	т. Алаузаг 3	1 2 3	Span 1.679 Sweep 1.00 ms (100 
-28.4 -39.4 -40.4 -50.4 -60.4	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A	nalyzer 2	Video BW 9.1	NHz	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (1001 
-29.4 -39.4 -49.4 -49.4 -50.4 -50.4 -60.4 	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A Spectrum A Spectrum A Interf 2: 000 pm 4	nalyzer 2	Video BW 9.1	manage         manage           manage	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (1001
-29.4 -39.4 -49.4 -50.4 -50.4 -60.4	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A Spectrum A Spectrum A Interf 2: 000 pm 4	nalyzer 2	Video BW 9.1	manage         manage           manage	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (100 
-29.4 -39.4 -49.4 -50.4 -50.4 -60.4	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A Spectrum A Spectrum A Interf 2: 000 pm 4	nalyzer 2	Video BW 9.1	manage         manage           manage	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (1001
-29 4 -39 4 -40 4 -50 4 -5	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A Spectrum A Spectrum A Interf 2: 000 pm 4	nalyzer 2	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (1001
-29 4 -39 4 -40 4 -50 4 -5	vzer 1	Sep 29, 2020 11:00:14 AM Spectrum A Spectrum A Spectrum A Interf 2: 000 pm 4	Atten: 30 dB Preamp. Of	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (1001
-29 4 -39 4 -40 4 -50 4 -5	vzer 1	Step 29, 2020 11:00:14 AM Sectors AM Sectors Con- Pres Ref. Int (5)	Atten: 30 dB Preamp. Of	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	Span 1.679 Sweep 1.00 ms (1001
-294 -394 -494 -494 -494 -494 -594 -594 -694 -694 -694 -694 -694 -694 -694 -6	vzer 1	Step 29, 2020 11:00:14 AM Sectors AM Sectors Con- Pres Ref. Int (5)	Atten: 30 dB Preamp. Of	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	span 1677 Sweep 100 ms (100) 
-29.4 -39.4 -49.4 -5	vzer 1	Step 29, 2020 11:00:14 AM Sectors AM Sectors Con- Pres Ref. Int (5)	Atten: 30 dB Preamp. Of	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	span 1677 Sweep 100 ms (100) 
-29.4 -29.4 -39.4 -49.4 -59.4 -59.4 -60.4 -6	vzer 1	Step 29, 2020 11:00:14 AM Sectors AM Sectors Con- Pres Ref. Int (5)	Atten: 30 dB Preamp. Of	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	span 1677 Sweep 100 ms (100) 
204 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	vzer 1	Step 29, 2020 11:00:14 AM Sectors AM Sectors Con- Pres Ref. Int (5)	Atten: 30 dB Preamp. Of	Video BW 9.1	Manager 3 Analyzer 3 A	1 2 3 M ₩ ₩ P N N	Span 1677 Sweep 10 ms (100 

Note: All results have been included cable loss and Simultaneous Factor.

Report Number: EM-F200416



APPENDIX B

*Tel:* +886 2 26099301 *Fax:* +886 2 26099303

# APPDNDIX B

## **TEST PHOTOGRAPHS**

(Model: 13U70P)

File Number: C1M2009193

Report Number: EM-F200416